

# A liking for sugar does not make it addictive



The media and some nutritionists often talk about “sugar addiction”, with some even comparing it to heroin or cocaine! However, many of us have been enjoying sugar as part of a healthy, balanced diet – so how much truth is there to this myth? Let’s take a closer look at the truth behind the so-called “sugar addiction”.

## DID YOU KNOW?

The idea of sugar addiction (dependence) has emerged from data derived mostly from rat studies – where rats tended to choose a sugary solution instead of a non-sweetened food. Scientists now argue this was because the sweeter food was more palatable and enjoyable, rather than a physical addiction to sugar.



## Definitions

**Addiction** is a physical (and sometimes psychological) need, characterised by an almost irresistible compulsion to use a substance, accompanied by uncontrolled consumption if it’s freely available, and withdrawal symptoms when there’s no access to the addictive substance. An example, might be tobacco smoking or alcohol abuse.

**Craving** is an intense desire that is difficult to resist but it has no physical basis. An example might be our desire to eat chocolate to help us feel better after a hard day.

## Is it an addiction or is it a craving?

When thinking about “addiction”, it’s important that we understand what we mean.

Addiction may be described as a physical and psychological need to keep doing something even if we know it causes harm to ourselves or others.

When you become addicted to a substance like alcohol or cigarettes you have a continuous desire to consume it. Over time, you need more and more of the substance to achieve the same effect – this is known as tolerance to the substance.

If you tried to stop, you would become ill for a while as your body has become used to having that substance and finds it difficult to manage without it – this is called withdrawal.

This is why people who are addicted to a substance, such as tobacco, alcohol or illicit drugs, find it so difficult to give up – their bodies have developed a physical need for the substance.

Think about it: the body is not actually able to tell the difference between sugar in a piece of fruit, such as an apple, or table sugar. Would you have true withdrawal symptoms if you missed your usual daily apple?

Craving is therefore a more accurate term to describe the intense desire to consume a particular food or food type that is difficult to resist. We might become obsessed by it, but it’s just that we like the taste. So when we say: “I’m addicted to Tim Tams!”, clearly, we are not “addicted”; we just enjoy them.



*We are genetically programmed to like sweet things when we are young but, contrary to what you would expect, instead of becoming tolerant to sugar and wanting more and more of it, our preference for sweet foods declines from adolescence onwards.*





## The feel-good factor

When you eat a food that can give you a lot of energy, like sugar or fat, it also triggers feelings of pleasure. This is because our brains have evolved to respond favourably to these foods as they were essential for survival in earlier times when food was not always plentiful. It is, in essence, natural that we should like sweet things but this does not mean that they will become an addiction – we simply enjoy them!

Studies of the human brain have shown that sweet foods activate brain areas associated with reward or pleasantness, similar to drugs of abuse. This is not surprising as they both provide pleasure. Since the brain is complex and many things like feelings and hormone levels can activate different areas of the brain, researchers have found it difficult to replicate the effects.

Think about other areas of life to which we are “addicted” – whether it be buying shoes or running in the park. These are life’s “pleasures”, which we want to do, not “addictions”, which we have to do – and sugar falls into this category.

## Is sugar addictive?

This is just not true. An addictive substance is one that causes the body to require more and more of it to satisfy its needs and that leads to unpleasant symptoms of withdrawal when it is not available. While people may enjoy and want sweet foods, it is unlikely that you actually need bigger and bigger portions to meet your needs and will suffer real physical withdrawal if they become unavailable.

To say that sugar is addictive like alcohol, drugs or tobacco is not based on the scientific facts. A review of research studies found no evidence that people who like sugar behave like they’re addicted, and they found no convincing food equivalent to the feeling of being intoxicated or ‘high’ like people addicted to drugs or alcohol might experience.

The lack of any credible scientific support for the claim of sugar addiction has been highlighted by the World Health Organisation and reviews on sugar addiction, which concluded that the evidence does not support the idea that sugar is physically addictive in humans.

## Why do we have cravings?

Eating is a complex behaviour involving many different hormones and systems in the body. While it would be easy to blame sugar for an “addiction”, the reality of food cravings is much more complex. A food craving is often seen as ‘comfort eating’, and is linked to emotional stress, feeling bored, anxious, upset, or just feeling low.

Food cravings are common and we don’t necessarily crave foods high in sugar. The most commonly craved food items are actually high in fat, such as fried chicken or potato chips, or have a combination of fat and sugar, such as cookies and ice-cream. Pizza is the most craved food item for men.



## THE SHORT AND SWEET OF IT

Sugar is not addictive, and nor are sugar-containing foods

1. We eat sweet foods because they help us to feel good – hence, we may crave them, but we don’t become physically addicted, needing more and more sugar or having withdrawal symptoms if we don’t keep feeding our “habit”

You can enjoy sugar in moderation as part of a healthy, balanced diet

2. Don’t let cravings occur: enjoying a sweet treat every now and then is a healthier approach than denying yourself one of life’s pleasures

**Information based on an overview of the scientific evidence.  
For individual health advice see a qualified health professional.**

### Further Reading

1. NeuroFAST [Internet]. University of Gothenburg. Consensus opinion on food addiction; 2013 [cited Nov 2016]. Available from: <http://www.neurofast.eu/consensus>
2. Westwater ML et al., Sugar addiction: the state of the science. H. Eur J Nutr. 2016; doi:10.1007/s00394-016-1229-6
3. Benton D The plausibility of sugar addiction and its role in obesity and eating disorders Clin Nutr 2010; 29(3): 288–303.
5. American Psychiatric Association. Diagnostic and statistical manual of mental disorders, 5th edition (DSM-5). Washington, DC: American Psychiatric Publishing; 2013.
6. Corwin RL, Hayes JE. Are Sugars Addictive? Perspectives for Practice. In: Fructose, High Fructose Corn Syrup, Sucrose and Health, Nutrition and Health [Internet]. New York: Springer Science & Business Media; 2014 [cited Nov 2016]. Chapter 13. Available from: [www.springer.com/gp/book/9781489980762](http://www.springer.com/gp/book/9781489980762)

**More info available at  
[www.allaboutsugars.com](http://www.allaboutsugars.com)**

This resource has been developed by the Australian Sugar Industry Alliance and aims to provide science based information on sugars and health.

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